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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/682,176	10/09/2003	Erik J. Bartone	70406/2-CON	7312

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David Lowry
Brown Rudnick Freed & Gesmer
One Financial Center, 18th Floor
Box IP
Boston, MA 02111

EXAMINER	
HOLLOWAY III, EDWIN C	

ART UNIT	PAPER NUMBER
2635	

DATE MAILED: 10/17/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/682,176	Applicant(s) BARTONE ET AL.	
	Examiner Edwin C. Holloway, III	Art Unit 2635	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *28 July 2005*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,5-18 and 20* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,5-18 and 20* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

EXAMINER'S RESPONSE

1. In response to applicant's amendment filed 7-28-05, all the amendments to the specification and claims have been entered. The examiner has considered the new presentation of claims and applicant's arguments in view of the disclosure and the present state of the prior art. And it is the examiner's opinion that the claims are unpatentable for the reasons set forth in this Office action:

Claim Rejections - 35 USC § 102 & 103

2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

3. Claims 12-18 and 20 are rejected under 35 U.S.C. 102(b) as being anticipated by McNamara (US 5818725) in combination with Yee (US 6300881) or Shuey (US 5874903).

Regarding claim 12, McNamara discloses a system for controlling energy distribution to energy consumers (col. 1 lines 35-43) comprising: a centralized data center (10); a plurality of device controllers in communication with said centralized data center (12,13); a plurality of parameter measuring devices in communication with said centralized data center (12,13); wherein said centralized data center reads parameters from said parameter measuring devices, computes control signals according to efficient power control algorithms operating on said parameters and communicates said control

signals to said device controllers. See fig. 1, col. 2 lines 32-42 and col. 3 lines 34-63. McNamara discloses wherein said centralized data center (10 and said device controllers (22) are in wireless communication (14) in col. 5 lines 34-36, but McNamara lacks a communication network including a plurality of two-way RF node components that each serve to both communicate with other RF node components and to communicate with device controllers and power measurement devices.

Yee discloses an analogous art system for monitor and controlling power usage with a communication network including a plurality of two-way RF node components 40/60 that each serve to both communicate with other RF node components 40/60 and to communicate with device controllers and power measurement devices 45/100 in cols. 3-8 utilizing peer to peer links allowing redundant transmission paths to increase the network's immunity to interference, blockage and node failures.

Shuey discloses an analogous art system for monitor and controlling power usage with a communication network including a plurality of two-way RF node components (transceiver in element 12) that each serve to both communicate with other RF node components 12/14A and to communicate with device controllers and power measurement devices (10A-D and meter processor)in cols. 3-5 an figs. 2 and 5 for two way communication allowing redundant

paths and permitting AMR nodes to reach "inaccessible meters" by repeating through communication thru other meters.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have included in McNamara the communication network including a plurality of two-way RF node components that each serve to both communicate with other RF node components and to communicate with device controllers and power measurement devices as disclosed in analogous art by Yee or Shuey to provide redundant transmission paths to increase the network's immunity to interference, blockage and node failures. The combination is at least suggested by McNamara teaching using wireless transmission in the distribution network.

Regarding claim 13, McNamara discloses wherein efficient power control algorithms compute said control signals to minimize power consumption by computing cost optimized power distribution over time in col. 2 lines 32-40.

Regarding claim 14, McNamara discloses wherein said parameters are communicated in real time and wherein said control signals are constantly re-computed according to changes in said parameters in col. 2 lines 32-40.

Regarding claim 15, McNamara discloses said parameters include electrical power levels in col. 2 lines 32-40.

Regarding claims 16-17, the monitoring and control 25 of McNamara is proximate (in the same facility location) to loads 26,28) in fig. 2a and col. 4.

Regarding claim 18, McNamara discloses further comprising facility controllers (22) in communication between said device controllers (22, home network) and said centralized data center (10,14,22) in col. 3 line 64- col. 4 line 1.

Regarding claim 20, McNamara discloses centralized data center 10 and facility controller 22 in wireless communication 14 in col. 5 lines 34-36; Yee discloses wireless links 52/54.

4. Claims 1, 5-8 and 9-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Davis (US 5576700) in combination with McNamara (US 5818725) in view of Yee (US 6300881) or Shuey (US 5874903).

Regarding claim 1, Davis discloses a method for monitoring and controlling power usage among a plurality of facilities (fig. 1, col. 7), comprising: providing a remotely controllable power control device (32) on at least one power consuming device (24) at each facility (20); remotely monitoring power usage at processing center (28) and command center (26) can control remotely controllable power control devices (32); and activating and deactivating said power consuming devices (24) by said remotely controllable power control devices (32) from said

distribution network (22), based on said remotely monitored power usage among said plurality of facilities (28). See col. 7 line 30 - col. 8 line 36. Davis does not expressly disclose remote monitoring of power usage at each facility and activating/deactivating power consumption devices from a single location.

McNamara discloses remotely monitoring power usage at each facility from one location (10), wherein said one location can control said remotely controllable power control devices (12,13) in col. 3 lines 34-48; and activating and deactivating said power consuming devices by said remotely controllable power control devices from said one location (10), based on said remotely monitored power usage among said plurality of facilities in col. 2 lines 33-42.

Yee discloses an analogous art system for monitor and controlling power usage with a communication network including a plurality of two-way RF node components 40/60 that each serve to both communicate with other RF node components 40/60 and to communicate with device controllers and power measurement devices 45/100 in cols. 3-8 utilizing peer to peer links allowing redundant transmission paths to increase the network's immunity to interference, blockage and node failures.

Shuey discloses an analogous art system for monitor and

controlling power usage with a communication network including a plurality of two-way RF node components (transceiver in element 12) that each serve to both communicate with other RF node components 12/14A and to communicate with device controllers and power measurement devices (10A-D and meter processor)in cols. 3-5 an figs. 2 and 5 for two way communication allowing redundant paths and permitting AMR nodes to reach "inaccessible meters" by repeating through communication thru other meters.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have included the techniques of McNamara discussed above in the invention of Davis, using one location for activating and deactivating power consumption devices by remotely controllable power control devices, based on remotely controlled monitored power usage among plurality of facilities that would have allowed optimization of power consumption for a power distribution network in col. 3 lines 45-48 of McNamara. It further would have been obvious to one of ordinary skill in the art at the time the invention was made to have included in the combination applied above the communication network including a plurality of two-way RF node components that each serve to both communicate with other RF node components and to communicate with device controllers and power measurement devices as disclosed in

analogous art by Yee or Shuey to provide redundant transmission paths to increase the network's immunity to interference, blockage and node failures. The combination is at least suggested by Davis teaching using wireless communication between the command center and the power measure/control device.

Regarding claim 5, Davis discloses wherein said step of monitoring power usage is performed by current sensing (70) in fig. 2 and col. 10 lines 32-51.

Regarding claim 7, Davis discloses wherein said step of monitoring power usage is performed by voltage sensing (70) in fig. 2 and col. 11 lines 1-16.

Regarding claims 6 and 8, wherein an electric utility meter at one of said facilities is not affected by said monitoring of power usage at said facility is considered inherent because a utility meter at the facility to measure power for local observation is not affected remote monitoring and no such affect is described in the references.

Regarding claim 9, Davis discloses a system for monitoring and controlling power usage among a plurality of facilities, comprising: a device controller (32) coupled to at least one power consuming device (24) at each facility (20), said device controller to control said at least one power consuming device (32,24); a power measurement device (33) within each facility

(20), to measure power consumption by power consuming devices within said facility. See col. 7 line 30 - col. 8 line 20. Davis does not expressly disclose the communication network and central location in communication with the network as recited in claim 9.

McNamara discloses a communications network (14), in communication with said device controllers and said power measurement devices (12, 22 home network); a central location (10), in communication with said communications network (14), to remotely monitor power usage at each facility as measured by said power measurement device (22 home network); wherein said central location communicates with said device controllers over said communications network in order to individually control said at least one power consuming device at each facility. See col. 3 lines 42-48.

Yee discloses an analogous art system for monitor and controlling power usage with a communication network including a plurality of two-way RF node components 40/60 that each serve to both communicate with other RF node components 40/60 and to communicate with device controllers and power measurement devices 45/100 in cols. 3-8 utilizing peer to peer links allowing redundant transmission paths to increase the network's immunity to interference, blockage and node failures.

Shuey discloses an analogous art system for monitor and controlling power usage with a communication network including a plurality of two-way RF node components (transceiver in element 12) that each serve to both communicate with other RF node components 12/14A and to communicate with device controllers and power measurement devices (10A-D and meter processor)in cols. 3-5 an figs. 2 and 5 for two way communication with redundant paths and permitting AMR nodes to reach "inaccessible meters" by repeating through communication thru other meters.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have included the techniques of McNamara discussed above in the invention of Davis with the central location communicating with the device controllers at each facility of the communication network to control at least one power consuming device at the facility to optimize power consumption as recited in col. 3 lines 45-48 of McNamara. It further would have been obvious to one of ordinary skill in the art at the time the invention was made to have included in the combination applied above the communication network including a plurality of two-way RF node components that each serve to both communicate with other RF node components and to communicate with device controllers and power measurement devices as disclosed in analogous art by Yee or Shuey to provide

redundant transmission paths to increase the network's immunity to interference, blockage and node failures. The combination is at least suggested by Davis teaching using wireless communication between the command center and the power measure/control device.

Regarding claim 10, Davis discloses said device controller (32) controls said power consuming device (24) by activating and deactivating said power consuming device in col. 7 lines 38-58.

Regarding claim 11, Davis discloses said system monitors and controls power usage in order to limit power consumption by said plurality of facilities in col. 3 lines 45-48.

Terminal Disclaimer

5. The terminal disclaimer filed on 7-28-05 disclaiming the terminal portion of any patent granted on this application which would extend beyond the expiration date of US6633823 has been reviewed and is accepted. The terminal disclaimer has been recorded.

Response to Arguments

6. Applicant's arguments with respect to claims 1, 5-18 and 20 filed 7-28-05 have been considered but are moot in view of the new ground(s) of rejection.

CONTACT INFORMATION

Information regarding the status of an application may be

obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact an Electronic Business Center (EBC) representatives at 703-305-3028 or toll free at 866-217-9197 between the hours of 6 a.m. and midnight Monday through Friday EST, or by e-mail at ebc@uspto.gov. The Patent EBC is a complete customer service center that supports all Patent e-business products and service applications. Additional information is available on the Patent EBC Web site at http://www.uspto.gov/ebc/index.html.

Any inquiry of a general nature should be directed to the Technology Center 2600 receptionist at (571) 272-2600.

Facsimile submissions may be sent via central fax number 571-273-8300 to customer service for entry by technical support staff. Questions related to the operation of the facsimile system should be directed to the Electronic Business Center at (866) 217-9197. On July 15, 2005, the Central FAX Number will change to. CENTRALIZED DELIVERY POLICY: For patent related correspondence, hand carry deliveries must be made to the Customer Service Window (now located at the Randolph Building, 401 Dulany Street, Alexandria, VA 22314), and facsimile transmissions must be sent to the Central FAX number, unless an exception applies. For example, if the examiner has rejected claims in a regular U.S. patent application, and the reply to the examiner's Office action is desired to be transmitted by facsimile rather than mailed, the reply must be sent to the Central FAX Number. Inquiries concerning only hours and location of the Customer Window may be directed to OIPE Customer Service at (703) 308-1202.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Edwin C. Holloway, III whose telephone number is (571) 272-3058. The examiner can normally be reached on M-F (8:30-5:00). If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Horabik can be reached on (571) 272-3068.

EH
10/12/05

EDWIN C. HOLLOWAY, III
PRIMARY EXAMINER
ART UNIT 2635